

Vidya Vikas Mandal's
Shree Damodar College of Commerce & Economics, Margao-Goa
Post-Graduate Department of Commerce (M. Com)
M.Com Part-II, Semester-III, Semester End Examination, November 2023
COM-600: Research Methodology (OA - 35)

Duration: 2 Hours

Max Marks: 40

Instructions:

1. This paper consists of *SIX* questions carrying *Equal marks*.
2. Question No.1 consists of *5 Compulsory* questions of *2 marks each*.
3. Answer *any THREE* questions from question 2,3,4,5 and 6.
4. *Each question carries 10 marks. Figures to the right indicate marks.*
5. *Tables to be provided wherever required.*

Q.1. Answer the following:

(5 × 2 = 10)

1. Give two points of distinction between Primary data and Secondary data.
2. Explain Pilot studies.
3. How will you code Scaled Questions?
4. Differentiate between Sampling and Non- Sampling Errors.
5. What do you understand by Fabrication?

Q.2.A. 'Types of research methods can be classified into several categories according to nature and purpose of the study, methods of data collection, type of data, research design and other attributes.' Explain any five types of research based on purpose of the study. (5)

B. 'The concept of academic dishonesty is extremely essential in the world of professional academic research and publishing.' Explain any five forms of academic dishonesty in research. (5)

Q.3.A. The probability that a house of a certain type will be burnt by fire in any 12 month period is 0.005. An insurance company offers to sell the owner of such a house Rs.29,000 one year term fire insurance policy for a premium of Rs.150. What is the company's expected gain? (5)

B. For certain types of computers, the length of time between charges of the battery is normally distributed with a mean of 50 hours and a standard deviation of 15 hours. John owns one of these computers and wants to know the probability that the length of time will be

a) Between 50 and 70 hours.

b) Less than 25 hours.

(5)

Q.4. The income of Mr. Shyam over the following period is given.

(10)

Year	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Income ('0000) Rs.	51	98	95	55	96	66	89	77	57	58

The least square equation is as follows:

$$y_i = 80.8 - 1.47x$$

Answer the following questions:

- Identify the monthly changes in income.
- Do the figures show a rising trend or falling trend?
- Calculate the trend values for the entire period.
- What does the difference between the given figures and trend values indicate?
- Estimate the income for the next 4 years.

Q.5. A random sample of 400 people from City A gave mean height 68" and standard deviation 2.5". Another random sample of 800 people from City B gave mean height 69.5" and standard deviation 2.4". Test the statistical significant difference between the mean heights of the inhabitants of both the cities at 5% significance level.

(10)

Q.6. Consider the following data.

(10)

Class	No. of students		Total
	Favouring	Opposing	
Higher Secondary	290	110	400
Graduate	190	210	400
Post Graduate	120	280	400
Total	600	600	1200

Use χ^2 test at 5% level to test the opinion regarding autonomous status of colleges is independent of the level of classes of students.